programs. This section's assessment is not a complete analysis or summary of forest management accomplishments in North Carolina, but presents an overview of accomplishments by NIPFs, who own 78 percent of North Carolina's forestland. Forest Inventory Analysis (FIA) data found in "Forest Statistics for North Carolina, 2002" (Brown 2004) was used to assess the current status of forest management practices in this chapter. Trends were identified by comparing the change in status between the 2002 FIA survey and the 1990 FIA survey for North Carolina (Johnson 1991, Brown 2004). Promoting sustainable forest management practices to the NIPF ownership class, will be important to enhance public benefits from trees, protect forests from threats, and conserve working forests for the future.

Family Forests Owners' Attitudes Toward Management

Family forest landowners in North Carolina have varying reasons for owning their land and differing levels of engagement with it. The numbers of NC landowners enrolled in forest certification programs, conservation easements, and cost-share programs, and who have a written management or stewardship plan, are very low.

Only 4 percent of family forest owners in North Carolina currently have a management plan for their forestland (Butler, 2008). NC family forest owners' future plans (next 5 years) for their forestland included either "leave it as is—no activity" (32 percent), "minimal activity to maintain forestland" (14 percent), or "have no current plans" (10 percent). Harvesting timber for sawlogs, pulpwood, or firewood was listed as a planned activity by less than 10 percent of family forest landowners. Only 6 percent of family forest owners in North Carolina have participated in cost-

share programs in the past 5 years (Butler, 2008).

This low participation in active forest management may reflect the desires and attitudes of forest owners. It may also be caused, however, by other factors, such as economy of scale on smaller parcels, lack of information on the benefits or associated costs from various management practices, and less than optimal outreach efforts by conservation program administrators (GfK NOP, 2006).

Just 15 percent of NC family forest owners who responded to the 2006 National Woodland Owner Survey indicated that they had received technical advice about the management of their property. The majority of family forest owners who responded indicated that their primary sources for obtaining forestry advice included state forestry agencies (55 percent), private forestry consultants (14 percent), university extension agencies (8 percent), loggers (7 percent), other landowners (6 percent), and federal agencies (5 percent). Forest management activities implemented in the last 5 years by family forest owners by resource activity have included planting trees (18 percent), fire hazard reduction (15 percent), wildlife habitat improvement (10 percent), herbicide application (9 percent), and site preparation (10 percent) (Butler, 2008; GfK NOP, 2006).

Status and Trends of Forest Management Practices in North Carolina

USDA Forest Service FIA data and analysis (Brown 2004) and other reports (Moffat 1998, Snider 1999, Siry 2002) indicate that while forest industry managers of forestland apply intensive forest management to a majority of their land, only a small portion of NIPF landowners are actively managing